

IN THE ABSTRACT:

At page 42, line 1, please change "A picture drawing or method used" to read --The picture drawing method is--.

At page 42, line 2, please delete "For generating".

At page 42, line 3, please change "data required for picture drawing" to read --Data required for picture drawing is generated--.

At page 42, line 5, please delete "generating".

At page 42, line 6, after "pixel data" please insert --is generated--.

At page 42, line 7, please change "frame buffer 18," to --frame buffer 18.--.

At page 42, line 8, please change "the" to --The--.

At page 42, line 12, please delete "the".

At page 42, line 13, please delete "means"; and change "number of times of texture" to read --number of times texture--.

At page 42, line 14, please change "accessing" to --is accessed--.

IN THE CLAIMS:

Please cancel Claims 2-4, without prejudice, and add the following new Claims 5-23:

~~--5.~~ An apparatus comprising:

a processor for generating coordinate data specifying a desired primitive;

a pixel generator for generating pixel data of the desired primitive;

A.2
CONT'D
SUB
RC1
180726.1

00630240-000100

A2
CONT'D

an accessing unit for accessing a memory and storing the pixel data generated by the

5 pixel generator into the memory according to an optimal pixel pattern; and

cont

a control circuit for specifying a shape of the optimal pixel pattern according to the coordinate data generated by the processor such that the accessing unit stores the pixel data into the memory with the minimum number of times of accessing the memory.- -

Sub D2

--6. An apparatus according to claim 5, wherein the control circuit specifies the shape of the optimal pixel pattern by selecting one pixel pattern from a plurality of pixel patterns according to the coordinate data, the plurality of pixel patterns being different in shape from each other and each of the plurality of pixel patterns having the same number of pixels.--

--7. An apparatus according to claim 5, wherein the control circuit calculates an aspect ratio of the desired primitive based on the coordinate data and specifies the shape of the optimal pixel pattern according to the aspect ratio.--

--8. A video game machine comprising the apparatus according to claim 5.--

--9. An apparatus comprising:

a processor for generating coordinate data specifying a desired primitive;

a pixel generator for generating pixel data of the desired primitive;

a control circuit for specifying a shape of a coordinate pattern which has a given size,

5 according to the coordinate data, for dividing a predetermined coordinate area including the

A2
CONT'D

coordinate data in accordance with the coordinate pattern, for detecting at least one coordinate pattern which includes an overlay portion with the desired primitive, and for outputting coordinate pattern information indicating the detected at least one coordinate pattern; and

an accessing unit for accessing a memory according to the coordinate pattern
10 information and for storing the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate pattern.--

--10. An apparatus according to claim 9, wherein the control circuit specifies the shape of the coordinate pattern such that the accessing unit stores the pixel data into the memory with the minimum number of times of accessing the memory.- -

--11. An apparatus according to claim 9, wherein the control circuit specifies the shape of the coordinate pattern by selecting one coordinate pattern from a plurality of coordinate patterns according to the coordinate data, the plurality of coordinate patterns being different in shape from each other and each of the plurality of coordinate patterns having the given size.- -

--12. An apparatus according to claim 9, wherein the control circuit calculates an aspect ratio of the desired primitive based on the coordinate data and specifies the shape of the coordinate pattern according to the aspect ratio.- -

--13. An apparatus according to claim 9, wherein the processor determines whether or not the desired primitive is beyond the predetermined coordinate area and, when the desired

A2
CONT'D

primitive is beyond the predetermined coordinate area, the processor divides the desired primitive into a plurality of primitives and executes coordinate transferring of each of the coordinate data
5 corresponding to one of the plurality of primitives such that each of the coordinate data which corresponds to one of the plurality of primitives is included in the predetermined coordinate area, whereby the plurality of primitives are processed successively as the desired primitive.--

--14. An apparatus according to claim 9, wherein the control circuit outputs the coordinate pattern information which indicates the overlay portion of the detected at least one coordinate pattern.--

--15. An apparatus according to claim 9, wherein the accessing unit accesses the memory according to the coordinate pattern information and reads the pixel data stored in the memory in units of the pixel data corresponding to the coordinate pattern.--

--16. A video game machine comprising the apparatus according to claim 9.--

17. A method used in an apparatus which comprises a memory for storing pixel data, the method comprising:

generating coordinate data specifying a desired primitive;

generating pixel data of the desired primitive;

A2
CONT'D

specifying a shape of a coordinate pattern which has a given size, according to the coordinate data;

dividing a predetermined coordinate area including the coordinate data in accordance with the coordinate pattern which has a given size;

detecting at least one coordinate pattern which includes an overlay portion with the
10 desired primitive;

outputting coordinate pattern information indicating the detected at least one coordinate pattern; and

accessing the memory according to the coordinate pattern information and storing the
pixel data generated by the pixel generator into the memory in units of pixel data corresponding to
15 the coordinate pattern.--

--18. A method according to claim 17, wherein the step of specifying a shape comprises specifying the shape of the coordinate pattern such that the pixel data is stored into the memory with the minimum number of times of accessing the memory.- -

--19. A method according to claim 17, wherein the step of specifying a shape comprises specifying the shape of the coordinate pattern from a plurality of coordinate patterns according to the coordinate data, the plurality of coordinate patterns being different in shape from each other and each of the plurality of coordinate patterns having the given size.- -

--20. A method according to claim 17, wherein the step of specifying a shape comprises calculating an aspect ratio of the desired primitive based on the coordinate data and specifying the shape of the coordinate pattern according to the aspect ratio.- -

--21. A method according to claim 17, further comprising: determining whether or not the desired primitive is beyond the predetermined coordinate area;

when the desired primitive is beyond the predetermined coordinate area, dividing the desired primitive into a plurality of primitives and executing coordinate transferring of each of the coordinate data corresponding to one of the plurality of primitives such that each of the coordinate data which corresponds to one of the plurality of primitives is included in the predetermined coordinate area; and

dealing with the plurality of primitives successively as the desired primitive. - -

--22. A method according to claim 17 wherein the step of outputting coordinate pattern information comprises outputting the coordinate pattern information such that the coordinate pattern information indicates the overlay portion of the detected at least one coordinate pattern.- -

--23. A method according to claim 17, wherein the steps of accessing and storing comprise accessing the memory according to the coordinate pattern information and reading the pixel data stored in the memory in units of the pixel data corresponding to the coordinate pattern.- -